



**Massachusetts Bay  
Transportation Authority**

# Means-Tested Fares Feasibility Study Update

---

Fiscal and Management Control Board

February 24, 2020

Lynsey Heffernan

# Agenda

---

- Growing Current Reduced Fare Programs
- Partnership Models
- Eligibility Determination
- Full Program Costs



# Improving Reduced Fare Programs

Youth Pass

EBT Cards

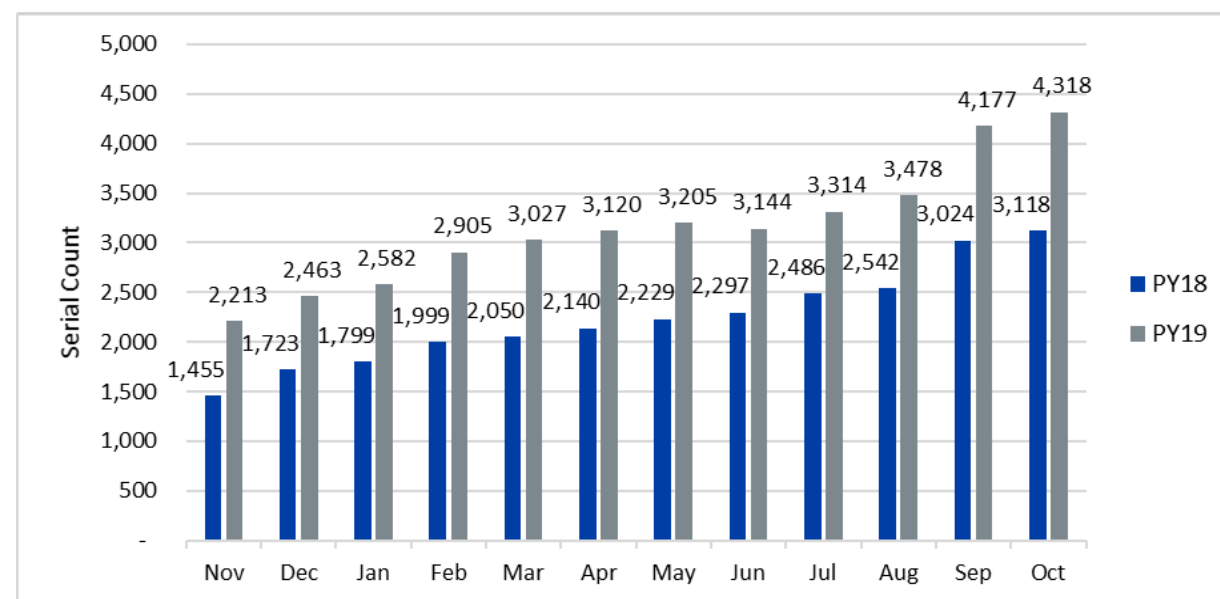
Technological Foundation



# Youth Pass Lessons Learned

- Program has seen strong growth since 2015 pilot. Spring '19 policy changes relieved burden on partners, but administrative limitations remain large
  - Coordination between 14 different communities takes substantial MBTA program management
  - Decentralized card distribution requires extensive partner effort and presents customer service limitations
  - Application intake still occurs in person
  - All cards expire on the same date, making program expansion difficult

Active Youth Pass Users in Program Year 2018 and 2019 by Month



# Reduced Fare Program FY 20 Workplan

- Youth Pass
  - 4,318 active participants at the end of PY19 (October 2019)
    - Participation up 38% YOY
  - New partner municipalities include: Everett, Lexington, Medford, & Watertown
    - Nearly all large communities in core service area on-boarded as partners
  - Upcoming in 2020 :
    - Marketing campaign to drive adoption among Youth residing in existing partners
    - Mailers to qualifying individuals through SNAP
- Technology Updates
  - FY20 MBTA Supplemental Budget request for hiring Program Manager and Developers to improve Reduced Fare technology systems and interfaces
- Process Improvement
  - Internal work to improve connection between the RIDE and T.A.P.
  - Documentation of current application/workflow processes of reduced fare programs



# EBT on the MBTA

- All MBTA points of sale (e.g., FVMs, RSTs) can accept Electronic Benefit Transfer (EBT) cards as valid form of payment
- Meeting with DTA to determine best mechanism to communicate this update to eligible participants
- Upcoming launch of webpage with additional information
- MBTA will be installing PIN pads to allow EBT use at Keolis Ticket Offices, as EBT cannot be used with onboard sales devices



# Running a Means-Tested Fare Program

Partnership Models  
Determining Eligibility



# Eligibility Protocols & Partnership Models

## Verification (How)

*Impacts how customers are able to enter the program and administrative costs based on partnership models.*

Option 1

### State Agency Partner

Statewide entity could assist in identification, outreach, and verification.

Option 2

### Regional Non-Profit Partners

Regional non-profit could assist in outreach and verification.

Option 3

### Municipal Partners

Like Youth Pass, municipalities could be partners for outreach and verification.

## Eligibility (Who)

*Impacts the number of people who qualify for the program, revenue loss, and operational costs.*

Option 1

### Program Based Eligibility

Participation in one of a set list of programs makes you eligible for the MBTA program.

Option 2

### Income Based Eligibility

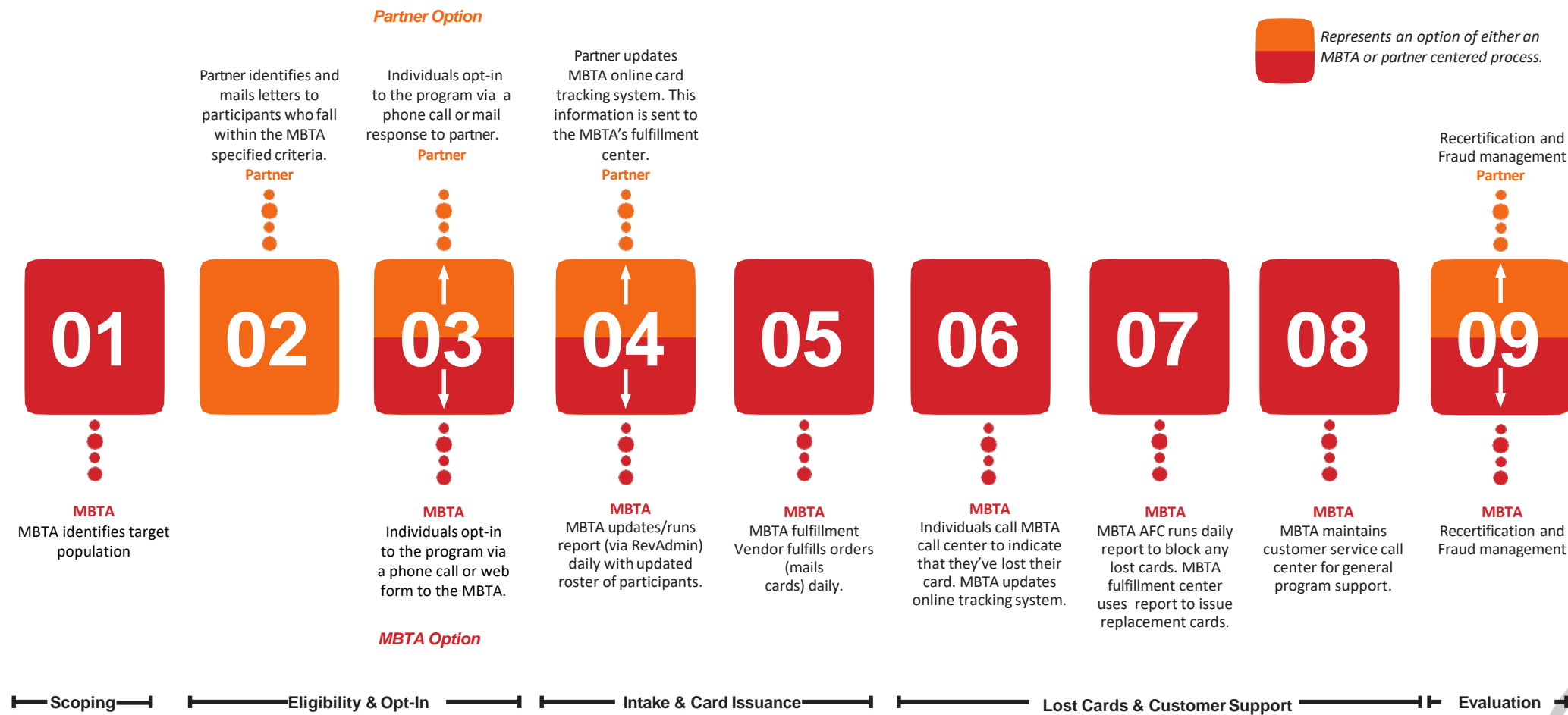
Proof of income below threshold FPL level makes you eligible for the MBTA program.

*Example: Below 200% FPL*





# Components of Means-Testing



# Potential Partnership Functions

- Possible functional assistance to build a Means Tested Fare program include:
  - Income verification/eligibility determination process,
  - Data collection practices & document management,
  - Outreach capabilities to reach potential clients,
  - Technological abilities for administration,
  - Brick and mortar facilities to support riders,
  - Staffing to handle questions and concerns of the public.
- Need to clearly define roles for the MBTA and any future partner.



## Eligibility

Differentiating eligibility threshold from a partnership to administer a means-tested fare program.

Narrows the range on estimates of loss fare revenue.



# Eligibility: Learning from State Agencies

- Partner agencies in state government have high-quality programs to determine income-level and eligibility for state and federal programs.
- Consumer's ease of use should be a primary consideration.
- Setting eligibility by programs, versus income level, is preferred by partners as easier to manage and communicate to public.
- Many partners also have re-certification/verification programs.
- Most state programs have high-churn levels of participants entering and exiting their programs over a short periods of time.



# Eligibility

- The MBTA can set eligibility for a means tested program. Options include:
  - Federal Poverty Level (FPL) level such as 100, 200 or 300%
  - Enrollment in other low-income verified program
  - Both of the above

Eligibility doesn't have to limit potential partnership model. Determining eligibility will allow the MBTA to refine cost estimates.



# Eligibility: The RIDE

- The costs of including the RIDE in this program are significantly different than other modes for a few reasons:
  - A high percentage of customers are low-income
  - Trips taken will increase significantly
  - The subsidy on the RIDE is where most of the expense is born
  - Operational costs are significant due to induced new trips
  - Administration is easier given existing eligibility screening

*Operationally, the RIDE has a different relationship between its customer's demand and available supply when compared to other modes. The RIDE cannot limit the availability of service to or strand any ADA paratransit eligible individuals.*



# Eligibility: The RIDE

- We expect a 29% increase to demand for customers eligible for reduced fare (approximately 363,000 additional trips)
- Due to this significant expected increase in demand, multiple risks exist to the implementation and timing of implementation of means testing for The RIDE that are not present for the fixed route
- To scale to this level, The RIDE will need to procure 192 new vehicles the first year of implementation and an additional 35 vehicles annually thereafter
- The RIDE will also need to renegotiate contracts with current designated service providers, including hiring approximately 300 new drivers and leasing two new lots
- The RIDE's software would need to be connected to whatever database holds the customer reduced fare data



# The RIDE Revenue Impacts

- The fare discount assumed was 50% for both ADA and Premium service
- We calculated a paratransit demand elasticity of 0.43 using data from the 2012 fare increase, 2014 fare decrease, and 2015 pilot
- In the baseline scenario with no means-tested fares, The RIDE expects to deliver 1.66 million trips in FY21 at an average per-trip cost of roughly \$44
- The projected annual cost of offering means-tested fares to RIDE customers in FY21 is roughly \$35-40 million per year for high participation and \$20-25 million per year in medium participation.
  - Majority of the increase is due to induced demand operating costs, with the remainder (~\$3 million) attributable to fare revenue loss
- A number of initiatives (conditional eligibility, reducing/eliminating premium territory) may mitigate increases to cost associated with reduced fares





## Paying for the Program

Revenue Impacts

Administrative Costs

Operational Impacts



# Full Costs of a Means-Tested Program

- The full costs to administer a program include:
  - Fare Revenue loss
  - Administration costs - including for partners
  - Operational costs on some modes
- Some of these costs are easier to estimate than others.
  - Administrative costs estimates depend upon a partnership model.
  - Operational and fare revenue costs are highly dependent upon eligibility determinations and rider uptake.



# Bus and Rapid Transit Revenue Impacts

- Low-income programs can induce increase in travel behavior.\* Revenue impacts vary based upon whether the riders use a monthly pass or pay-as-you-go. Estimates of revenue impact annually for bus/rapid transit are presented below.

Annual Revenue Losses Using the Census-Based Methodology:  
Bus and Rapid Transit Stops (in Millions of Dollars)

Income Level	HH of 1 Income	Enrollment Rate	Participating Riders	Margin of Error	Revenue Loss Estimate	Revenue Margin of Error
125% FPL	\$15,613	High	43,210	16,175	\$20.5	\$7.7
200% FPL	\$24,980	High	69,108	20,005	\$32.8	\$9.5
300% FPL	\$37,470	High	107,421	23,768	\$51.0	\$11.3

\* Jeffrey Rosenblum, *How Low-income Transit Riders in Boston Respond to Discounted Fares: A Randomized Controlled Evaluation: Preliminary Results*, MIT, June 5, 2019.



# Commuter Rail Revenue Impacts

- For Commuter Rail, which has been less studied, it is harder to predict impacts
- However, based upon current ridership, and type of pass purchased today, we can expect approximately \$175,000 monthly revenue loss, totaling \$2.1 million annually
- Predicting uptake of new riders to the Commuter Rail based upon the implementation of low-income fare is even more difficult. However, any new induced trips would reduce the total revenue loss
- No analysis conducted for the ferry



# Administrative Costs for MBTA

Intake	Fulfillment	Case Management	Customer Support
<ul style="list-style-type: none"><li>• Online application</li><li>• Expanded system to allow partners to intake participants</li></ul>	<ul style="list-style-type: none"><li>• Improvements to Card Distribution</li></ul>	<ul style="list-style-type: none"><li>• Build a Case Management System to store documents</li><li>• Connection to AFC system</li></ul>	<ul style="list-style-type: none"><li>• Call Center enhancements to support new program</li><li>• Staffing support for administration</li></ul>
Estimated Timeline: 6 month - 1 year	Estimated Timeline: 1 year	Estimated Timeline: 1 year+	Estimated Timeline: 6 months- 1 year

NOTE: Can be done concurrently

Not including administrative costs for any future partner in staffing, IT, infrastructure, etc.

# Summary: Variable Costs by Mode

	Operational Costs	Administrative Costs <i>Dependent upon the Partnership Model</i>	Revenue Loss
Bus/RT	<div>?</div> <p>70,000 ±20,000 possible riders</p>	<div>?</div>	<div>\$32.8M ±9.5M</div>
CR	<div></div> <p>Low Ridership</p>	<div>?</div>	<div>\$2M</div> <p>Low Ridership</p>
The RIDE	<div>\$16-18M</div> <p>Significant Operational Impacts: 363,000 induced trips</p>	<div>?</div>	<div>\$2-3.5M</div>

# Conclusion

---

- Policy Questions
  - Eligibility Standard: *What should the MBTA set as a criteria?*
  - Partnership: *What type of partnership model should we pursue?*
  - Given the operating impact: *How should we include the RIDE in our planning and analysis?*
  - Revenue/Cost: *How should the lost fare revenue and administrative costs be covered?*
  - Back-End: *Should we continue to design the technological capacity to support a future with a greatly expanded Means-Tested Fare program?*
- Once the program is funded, and these answers are determined, it would be a minimum of a year to fully implement. Earlier pilots may be possible depending upon the partnership model.

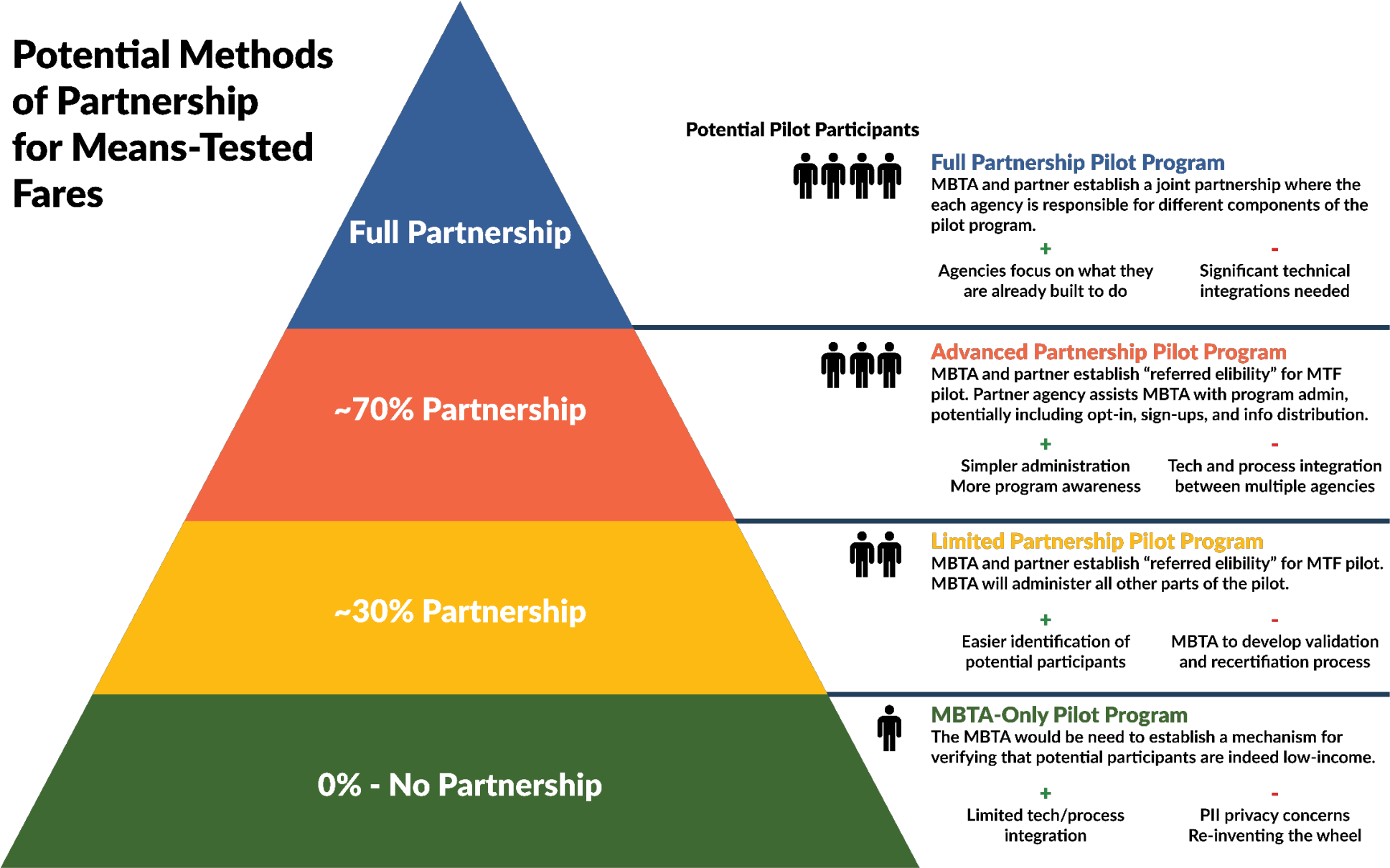


# Appendix

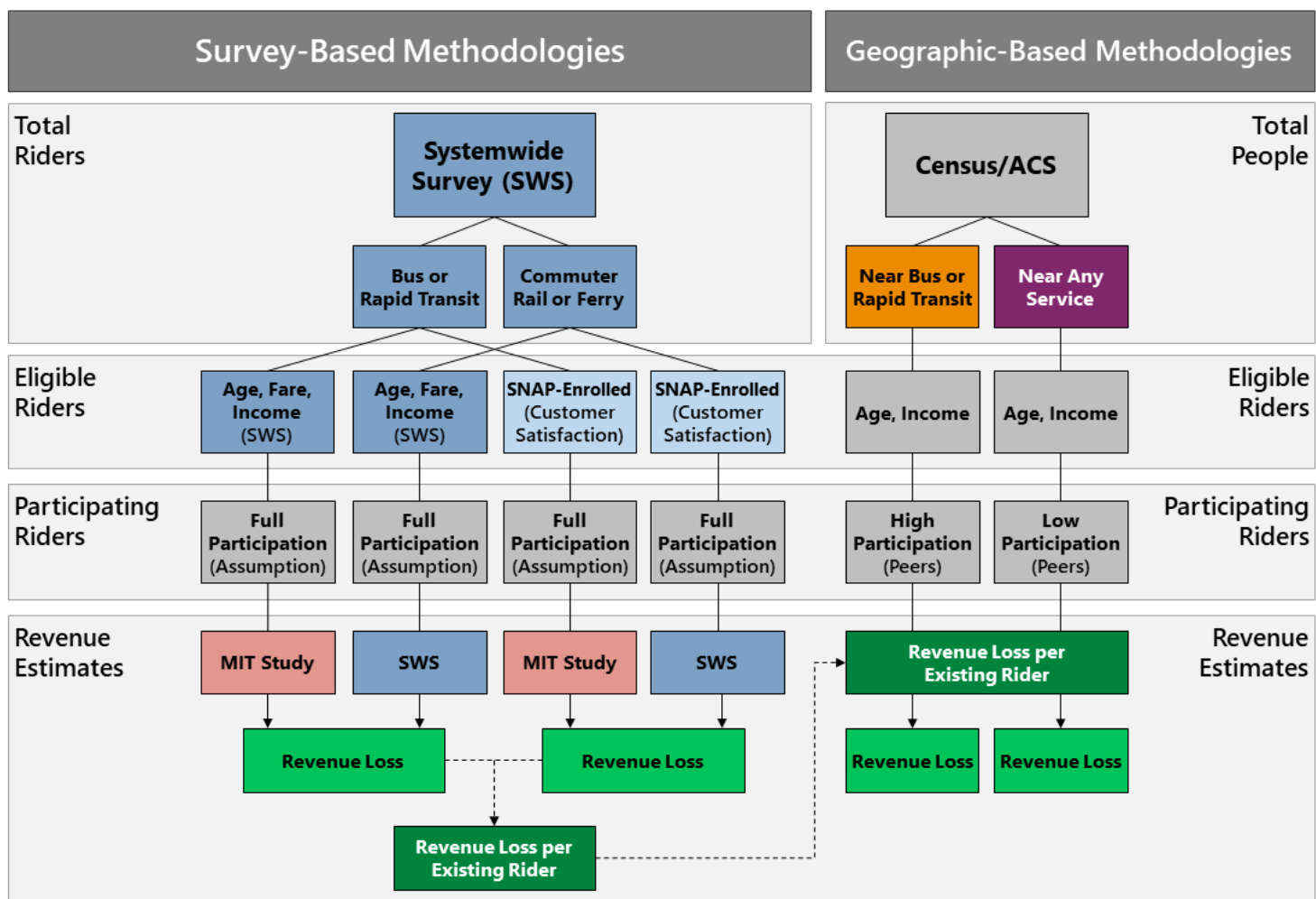




# Potential Methods of Partnership for Means-Tested Fares



# Revenue Estimate Methodologies



## Eligible Riders (Fixed Route)

- Determining the number of riders, depends on the income range for eligibility. Ridership estimates range from a low of **27,000** potentially eligible riders within close geography to the MBTA service system to a high of **107,000 riders**. Note these are riders, not trips.

Analysis Method	Very Low Income (Various)	Low Income (< 200% FPL)	Medium Income (< 300% FPL)
Systemwide Survey	31,000	65,000	101,000
Intercept Survey	—	25,000 (SNAP enrolled)	—
US Census (All Stops)- Low % Uptake	27,000 ± 10,000	43,000 ± 12,000	66,000 ± 14,000
US Census (Bus/RT Stops)- High % Uptake	43,000 ± 16,000	69,000 ± 20,000	107,000 ± 24,000

*Each data source has different ranges and sources of error. All estimations were to the nearest 1,000.*



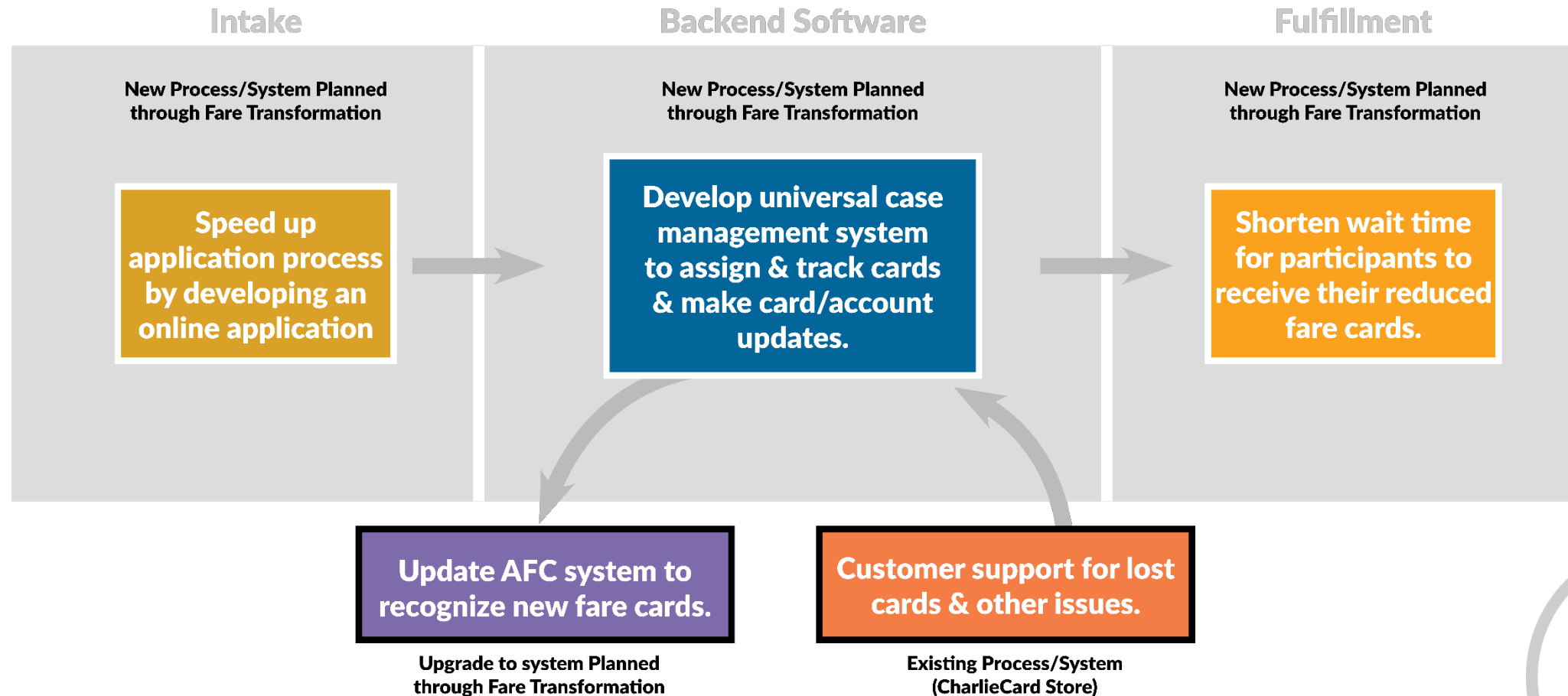
# Fare Collection Technology Limitations

- The MBTA's current fare collection is a **card-based system**, the CharlieCard, on bus/subway.
  - Currently, to confer reduced fare benefits, smart cards are encoded with additional information regarding the program and relevant fare.
  - This same technology can be used today on the Rapid Transit/Bus network.
- On the Commuter Rail and Ferry, customers must present these smart cards to the conductor in order for them to know to charge them the appropriate fare for visual validation. Additionally, customers can use mTicket app to purchase reduced fare tickets.
  - This same technology can be used today for a reduced fare program.
- In the future, with fare transformation, the MBTA will be in a position to have greater flexibility with fares, verification, and distribution.



# Improve Reduced Fare Business Process

- Strategic investments in MBTA internal IT systems and support teams can unlock reduced fares for wider population, both means-tested fares and existing reduced fares programs
- Some investment already budgeted as part of Fare Transformation but significant time needed to implement changes



# Additional Improvements for Means-Testing

- Some of these systems/processes overlap with existing reduced fare programs, but all require upgrades
- Would require additional customer support resources

